Application No. 10/081,478 Amdt. Dated December 18, 2006 Reply to Office Action of June 22, 2006

Amendment to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of claims:

1-20 Canceled.

- 21. (Currently amended) An implantable article for separation and regeneration of tissue at a tissue defect site A substrate comprising a substantially planar structure having at least one microtextured upper and lower surfaces; said upper surface one of said surfaces comprising grooves and ridges having a width and a height of about 2 to about 10 microns, proportioned to a cell morphology of soft tissue cells; and said lower surface another of said surfaces comprising grooves and ridges having a width and a height of about 8 to about 25 microns, proportioned to a cell morphology of bone tissue cells for promoting bone tissue growth; said article substrate being substantially planar and biocompatible.
- 22. (Currently amended) The <u>substrate</u> of claim 21, <u>wherein</u> said <u>article</u> substrate has a thickness of between about 200 and about 500 microns.
- 23. (Currently amended) The <u>article substrate</u> of claim 22, <u>wherein said article substrate</u> is flexible.
- 24. (Currently amended) The <u>article substrate</u> of claim 21, wherein said <u>article substrate</u> is bioabsorbable.
- 25. (Currently amended) The <u>article substrate</u> of claim 21, wherein said <u>article substrate</u> is made of at least one material selected from the group consisting of polylactic acid homopolymers, polyglycollic acid co-polymers, polylactones, polypeptides, polyvinyl

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alcohols, Hench's bioglass, fibrinogen and polyimino-carbonate, and natural polymers including collagen and polysaccharides.

- 26. (Currently amended) The article <u>substrate</u> of claim 25, wherein a weight of said material is in a range of one to five grams/cm².
- 27. (Currently amended) The <u>article substrate</u> of claim 21, wherein said lower surface has osteoconductive chemical properties.
- 28. (New) A biocompatible substrate comprising a substantially planar structure having at least one microtextured surface; said surface comprising a plurality of alternating grooves and ridges having a width and a height of about 1.5 to about 12 microns for promoting soft tissue or bone tissue growth.
 - 29. (New) The substrate of claim 28, wherein said substrate comprising microtextured first surface and an opposing surface; said first surface comprising grooves and ridges having a width and a height of about 2 to about 10 microns, proportioned to soft tissue cells; and said opposing surface comprising grooves and ridges having a width and a height of about 8 to about 12 microns, proportioned to bone tissue cells for promoting bone tissue growth.
- 30. (New) The substrate of claim 28, wherein said substrate has a thickness of between about 200 and about 500 microns.
- 31. (New) The substrate of claim 28, wherein said substrate has a thickness of about 500 microns.
 - 32. (New) The substrate of claim 28, wherein said substrate is flexible.
 - 33. (New) The substrate of claim 28, wherein said substrate is bioabsorbable.

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- 34. (Currently amended) The substrate of claim 28, wherein said substrate is made of at least one material selected from the group consisting of polylactic acid homopolymers, polyglycollic acid co-polymers, polylactones, polypeptides, polyvinyl alcohols, Hench's bioglass, fibrinogen and polyimino-carbonate, and natural polymers including collagen and polysaccharides.
- 35. (New) The substrate of claim 34, wherein a weight of said material is in a range of one to five grams/cm².
- 36. (New) The substrate of claim 28, wherein said opposing surface has osteoconductive chemical properties.